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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,165	12/31/2003	J. Nelson Wright	341148021US	5006

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EXAMINER

WEATHERBY, ELLSWORTH

ART UNIT	PAPER NUMBER
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3768

NOTIFICATION DATE	DELIVERY MODE
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03/31/2011

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentprocurement@perkinscoie.com

Office Action Summary	Application No.	Applicant(s)	
	10/750,165	WRIGHT ET AL.	
	Examiner	Art Unit	
	ELLSWORTH WEATHERBY	3768	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 January 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 and 32-38 is/are pending in the application.
- 4a) Of the above claim(s) 6-27,32-34,37 and 38 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,35 and 36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 35 is objected to because of the following informalities: Regarding claim 35, “applying an excitation at one of a set of frequencies” is unclear. That is, it is not clear if an excitation is applied at a single frequency or if refers to a range. The claim language should read, “*applying an excitation at a frequency selected from a set of frequencies*”. Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-5 and 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paradiso et al. (USPN 6,404,340) in view of Rodgers et al. (USPN 6,340,932).

5. Paradiso et al. (hereinafter Paradiso) teaches locating a marker associated with a patient (col. 2, ll. 26-47), the marker having a marker resonant frequency (col. 2, ll. 47-50), the method comprising, applying an excitation at one of a set of frequencies to the marker using an excitation source (col. 4, ll. 51-53); receiving a plurality of inputs indicative of a sensed magnetic flux induced by the marker in response to the excitation (col. 3, ll. 53-57; col. 5, ll. 3-5); repeating the exciting and receiving steps across a range of frequencies (col. 4, ll. 51-58); identifying the marker resonant frequency based upon the multiple sets of plurality of inputs (col. 5, ll. 3-5); Paradiso goes on, teaching analyzing the resonance set of plurality of inputs indicative of a sensed magnetic flux to induced by the marker in response to the excitation at the marker resonant frequency and determining the location of the marker by analyzing the resonance set of plurality of inputs (col. 2, l. 6-28; col. 4, l. 47- col. 5, l. 28). Paradiso also teaches determining the location of each marker's unique resonance frequency by sweeping through a range of frequencies (col. 2, ll. 28-49; col. 5, ll. 3-5).

6. Paradiso does not expressly teach adjusting the excitation source to provide further excitation at a marker resonant frequency.

7. In a similar frequency, Rodgers et al. (hereinafter Rodgers) teaches a carrier with antenna for RF identification (Abstract; Figs. 1-33). Rodgers teaches that RFID systems find applications in a plurality of fields and provides an exemplary arrangement where an interrogator (e.g. excitation source) operates using a plurality of transceivers, each

transceiver programmed with a unique identifier (col. 1, ll. 26-45), where each transceiver includes a resonant circuit (col. 2, ll. 14-44). Here, Rogers teaches providing improved efficiency with faster or more accurate identification of transceivers (col. 3, ll. 1-11). The system and method interrogates a plurality of RF resonant circuits (201, 232) with a carrier wave band (170) where signal (172) represents the response of the RF resonant circuits detectable by the system (col. 14, ll. 21-44). Rodgers goes on, teaching that the interrogator applies the transmit-receive function iteratively, incrementing the transmit frequency until all the transmit frequencies have been transmitted (col. 16, ll. 1-12). Upon completion of the iterative incrementing of the transmit frequency the peak values of the returned signal properties are determined, which identifies one or more candidate frequencies (col. 17, ll. 1-36). Upon identification of candidate frequencies further analysis may be employed to determine which of the candidate frequencies is optimal, where a subscan procedure provides further excitation at the RF resonant circuit's resonant frequency (col. 18, ll. 1-25). The Subscan procedure is repeated and the RF resonant circuit is identified based on the response from (col. 18, ll. 26-57).

8. Because both Paradiso and Rodgers teach the detection and tracking of multiple circuits simultaneously, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the tuning marker Paradiso in view of the robust RF device resonant frequency identification scheme of Rodgers et al. The motivation to modify Paradiso in view of Rodgers would have been to more accurately identify the

markers even in the presence of signal degradation or coupling by surrounding structures or antennas, as taught by Rodgers.

Response to Arguments

9. Applicant's arguments filed 1/24/2011 have been fully considered but they are not persuasive.

10. Applicant submits a letter requesting Interview with the Examiner. The Examiner had left a message with Susan Betcher (Reg. No. 43,498) to schedule the interview. The Examiner waited several days before any substantive action, as requested by Applicant. However, there was no reply.

11. Applicant alleges that the primary reference, Paradiso discloses a continuous wave excitation of constant amplitude and frequency. Specifically, Applicant alleges that the frequency sweeping device of Paradiso is not adjustable and fails to teach adjusting the excitation source to provide further excitation at the marker resonant frequency. Here, the Examiner agrees and notes that this was acknowledged by the 07/23/2010 Non-Final Rejection. This deficiency in Paradiso was resolved by the disclosure of Rodgers, as was set forth by the 07/23/2010 Non-Final Rejection. However, Applicant does not contest Rodgers as teaching adjusting the excitation source to provide further excitation at the marker resonant frequency. Here, Applicant merely contests the rationale for modifying Paradiso with Rodgers. Specifically, Applicant contests "both Paradiso and Rodgers teach detection and tracking of multiple circuits simultaneously."

as merely a conclusory statement. The Examiner disagrees because both Paradiso and Rodgers teach detection and tracking of multiple circuits simultaneously (See Paradiso: col. 2, ll. 47-49; col. 5, ll. 5-12 & Rodgers: col. 2, ll. 28-62). Thus, the Examiner maintains that there would be motivation to modify Paradiso with Rodgers to more accurately identify the markers even in the presence of signal degradation or coupling by surrounding structures or antennas. Furthermore, the Examiner maintains the modification of Paradiso with Rodgers would not change the principle of operation of Paradiso. It would merely more accurately or precisely identify the markers.

12. Applicant further alleges that Paradiso discloses coils which serve as both excitation and sense coils, but does not disclose separate excitation and sensing subsystems. In response to Applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., separate excitation and *sensing subsystems*) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

13. Applicant further alleges that Rodgers does not disclose receiving a resonance set of plurality of inputs indicative of a sensed magnetic flux induced by the marker in response to the excitation at the marker resonance frequency. In response to Applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA

1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Here, the Examiner stands that Rodgers provides receiving a resonance set of plurality of inputs indicative of a sensed magnetic flux induced by the marker in response to the excitation at the marker resonant frequency (See Rodgers: col. 18, ll. 7-57). However, Paradiso also provides receiving a resonance set of plurality of inputs indicative of a sensed magnetic flux induced by the marker in response to the excitation at the marker resonant frequency and analyzing the resonance set to determine a location (col. 5, ll. 3-35). Thus the Examiner maintains that the combination of Paradiso in view of Rodgers merely improves the accuracy or precision of the position tracking of Paradiso.

15. Nevertheless, the Examiner recognizes the applicant's contribution to the prior art. However, the instant claims 1-5 and 35-36 are substantially broad such that RFID tags, which are known to be embedded in various objects including clothing, employee identification cards or the like may be applied as prior art. That is, the recitation marker associated with a patient has not been given substantial patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Conclusion

16. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ELLSWORTH WEATHERBY whose telephone number is (571) 272-2248. The examiner can normally be reached on M-F 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le can be reached on (571) 272-0823. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/EW/

/Long V Le/
Supervisory Patent Examiner, Art Unit 3768